UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,100	12/18/2000	Thomas E. Tahan	5181-59000	5272

7590   08/16/2004

B. Noel Kivlin
Conley, Rose & Tayon, P.C.
P.O. Box 398
Austin, TX 78767

EXAMINER
OSMAN, RAMY M

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/740,100	TAHAN, THOMAS E.
	Examiner	**Art Unit**	
	Ramy M Osman	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-81_ is/are pending in the application.
   4a) Of the above claim(s) _1-48_ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _49,52-60,63-71 and 74-81_ is/are rejected.
7) ☒ Claim(s) _50,51,61,62,72 and 73_ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____ .
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Status of Claims

1.   This communication is responsive to the amendment filed on June 10, 2004 where

applicant responded to Examiners restriction requirement. Claims 49-81 are pending.

Election/Restrictions

2.   Applicant's election without traverse of claims 49-81 in the reply filed on June 10, 2004

is acknowledged.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

4.   Claims 55 and 58 recites the limitation "AAS" in lines 3 and 2, respectivly. There is

insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 49,52-60,63-71 and 74-81 rejected under 35 U.S.C. 103(a) as being unpatentable

over Gooderum et al (US Patent No 5,918,018) in view of Sharma et al (US Patent No

6,754,716).

7.   In reference to claim 49, Gooderum teaches a method of community separation control in

a Multi-community Node (MCN) (Abstract and Summary), said method comprising:

ensuring routing table compliance with a community separation policy (column 7 lines

50-67 and column 11 lines 40-67);

validating a data packet; allowing further processing of said data packet in response to

detecting said data packet is validated; and discarding said data packet in response to detecting

said data packet is not validated (column 12 lines 20-57).

Gooderum fails to explicitly teach wherein all routing table updates are validated to

ensure said compliance. However, Sharma teaches routing table updates are validated to ensure

compliance with network policy to prevent network attacks (Abstract and column 2 lines 37-67).

It would have been obvious for one of ordinary skill in the art to modify Gooderum by

validating routing table updates to ensure compliance as per the teachings of Sharma so as to

prevent network attacks.

8.	In reference to claim 52, Gooderum teaches wherein said first address is a destination address and said first address set is an Attached Address Set (column 12 lines 20-57).

9.	In reference to claim 53, Gooderum teaches wherein said first address is a Network Address Community Set (NACS) corresponding to a destination address of said next hop, and wherein said first address set is an Interface Community Set (IFCS) of said network interface (column 12 lines 20-57).

10.	In reference to claim 54, Gooderum teaches wherein said data packet is an outgoing data packet, and wherein validating said data packet comprises:

determining said destination address is reachable; and determining a community set corresponding to an interface over which said data packet is to be output includes a community set corresponding to said destination address (column 11 lines 44-67 and column 18 lines 35-55).

11.	In reference to claim 55, Gooderum teaches wherein said data packet is an incoming data packet, and wherein validating said data packet comprises checking that a source address of said data packet is within an AAS of the interface over which said data packet was received (column 12 lines 20-57).

12.	In reference to claim 56, Gooderum teaches wherein said data packet is received on a first interface of said MCN and is to be forwarded to a second interface of said MCN, and wherein validating said data packet comprises determining an intersection of an Interface Community Set (IFCS) of said first interface with an IFCS of said second interface is not null (column 7 line 50 – column 8 line 30 and column 12 lines 20-57).

13.   In reference to claim 57, Gooderum teaches the method further comprising consulting a

Community Information Base (CIB) (Summary, column 7 line 50 – column 8 line 3 and column

14 lines 25-44).

14.   In reference to claim 58, Gooderum teaches wherein said CIB includes an IFCS

corresponding to each interface of said MCN, and an AAS corresponding to each interface of

said MCN indicating destination addresses or destination subnets which are reachable through

each of said interfaces (Summary, column 7 line 50 – column 8 line 3, column 8 lines 25-52,

column 8 line 62 – column 9 line 15, column 11 lines 19-30 and column 14 lines 25-44).

15.   In reference to claim 59, Gooderum teaches the method further comprising recording an

event corresponding to said update in response to determining said destination address is not

within said first address set (column 17 line 60 – column 18 line 10).

16.   Claims 60,63-71,74-81 do not teach or define any new limitations above claims 49,52-59

as mentioned above and are therefore rejected for similar reasons.

Allowable Subject Matter

17.   Claims 50,51,61,62,72 and 73 objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

18.   The following is a statement of reasons for the indication of allowable subject matter:

determining a network interface through which a next hop corresponding to an update of

said updates will be reached; wherein said network interface is determined by either extracting

an identification of said network interface from said update or by finding a network interface

whose network address prefix matches that of said next hop.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ramy M Osman whose telephone number is (703) 305-8050.

The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne can be reached on (703) 308-7562. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMO
August 5, 2004

SALEH NAJJAR
'MARY EXAMINER